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REMARKS

Reconsideration is requested in view of the above amendments and the following remarks. Editorial revisions have been made in claims 1-15. The revisions are supported by the original disclosure. No new matter has been added. Claims 1-15 remain pending in the application.

Claim Rejections – 35 USC § 102

Claims 1 and 3-4 are rejected under 35 USC § 102(b) as being anticipated by Jorg Alexnat et al. (US 6,058,702). Applicants respectfully traverse this rejection.

Claim 1 includes a combustion engine having an exhaust to emit water and exhaust gases. Claim 1 also requires a sound-dampening device including a tubular member having an inner diameter and two or more rings located on the inner diameter of the tubular member. Claim 1 also requires that each of the two or more rings having an inner surface facing directly an inner space of a tubular member. Claim 1 further requires the rings being positioned and adapted to create water droplets from the water as the exhaust gases and the water exit the combustion engine.

As noted in the background of the specification, in marine exhaust systems, a flexible exhaust hose is coupled between the combustion engine of a generator set (genset) and a muffler and water separator. These flexible exhaust hoses transfer the exhaust gases and the raw water from the genset to the muffler and water separator that are located remote from the genset. The claimed exhaust assembly, in particular, the ring structure, helps form the water into water droplets and mix the gas with the water so as to reduce noise generated by the combustion engine. When the water flows into the sound dampening device of the present invention, the rings constrict the water and interfere with the flow of the water. The water then builds up and spills over the rings, creating turbulence in the water and further creating a substantial amount of water droplets. These water droplets are mixed with gas, and the noise generated by the combustion engine is reduced. The constriction provided by the rings also increases the velocity of the exhaust gas to more effectively pick up drops of water from the bottom of the turbulent member and mix the water with the gas. These factors, among others, provide for the sound

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dampening properties provided by exhaust tube (see page 4, lines 12-23 and page 5, line 27 to page 6, line 9 of the present specification).

Jorg Alexnat et al. fail to disclose an inner surface of each of two or more rings, which faces directly an inner space of a tubular member, as required by claim 1. Nor do Jorg Alexnat et al. disclose rings positioned and adapted to create water droplets from water as the exhaust gases and the water exit the combustion engine, as recited in claim 1. On the contrary, the inner surface of Jorg Alexnat et al. sound absorbing materials 57 and 58 do not face an inner space of the silencer directly in that there are pipes 53 and 54 passing through the sound absorbing materials (see Fig. 3 of Jorg Alexnat et al.). The inner surfaces of the Jorg Alexnat et al. sound absorbing materials 57 and 58 are in fact in direct contact with the outer surface of the pipes 53 and 54, rather than facing the inner space of the silencer directly, as required by claim 1. In addition, since the Jorg Alexnat et al. sound absorbing materials do not face directly the inner space of the silencer and thus do not contact the exhaust gases and water exiting the combustion engine, it is impossible for the sound absorbing materials to be positioned and adapted to create water droplets as the exhaust gases and the water exit the combustion engine in the way as required by claim 1.

The rejection indicates that the language "the rings are positioned and adapted to create water droplets" is not limiting in that any gas containing a vapor would condense when subject to a cooling surface such as the rings of Jorg Alexnat. Applicants respectfully contend that the claimed rings are distinct in that the claimed rings function as an obstruction constricting the water so as to create water droplets. In fact, there is no cooling process that disclosed or suggested by Jorg Alexnat et al. that can create water droplets from water as required by claim 1.

For at least these reasons above, claim 1 is patentable over Jorg Alexnat et al. Claims 3 and 4 depend from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claims.

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Claims 6 and 8 are rejected under 35 USC § 102(b) as being anticipated by Davey (US 5,639,127). Applicants respectfully traverse this rejection.

Claim 6 requires that an inner surface of each of two or more rings faces directly an inner space of a flexible exhaust hose. Claim 6 also requires the rings be positioned and adapted to create water droplets from water as exhaust gases and the water exit the combustion engine. The claimed ring structure helps form the water into water droplets and mix the gas with the water so as to reduce noise generated by the combustion engines. Without the rings, the water would mostly stay on the bottom of the hose. The constriction provided by rings also increases the velocity of the exhaust gas to more effectively pick up drops of water from the bottom of the hose and to be able to carry the water with the gas. These factors, among others, provide for the sound dampening properties provided by exhaust hose 200 (see for example, page 5, line 27 to page 6, line 9 of the present specification).

Unlike the present invention of claim 6, Davey discusses a flexible coupler apparatus for joining successive lengths of pipe in an exhaust system for a vehicle. Davey fails to disclose an inner surface of each of two or more rings, which faces directly an inner space of a flexible exhaust hose, as required by claim 6. Nor does Davey disclose the rings being positioned and adapted to create water droplets as exhaust gases and water exit the combustion engine, as recited in claim 6. On the contrary, the Davey spacer members 25 and 26 do not directly face an inner space of the silencer in that the inner surfaces of the spacers 25 and 26 are covered by an inner member 20 (see Fig. 1 of Davey). Since the Davey spacers do not face directly the inner space of the flexible coupler apparatus and thus do not contact the exhaust gases and water exiting the combustion engine, it is impossible for the sound absorbing materials to be positioned and adapted to create water droplets as the exhaust gases and the water exit the combustion engine in the way as required by claim 6.

The rejection indicates that the language "the rings are positioned and adapted to create water droplets" is not limiting in that any gas containing a vapor would condense when subject to a cooling surface such as the rings of Davey. Applicants respectfully contend that the claimed rings are distinct in that the claimed rings function as an

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obstruction constricting the water so as to create water droplets. In fact, there is no cooling process that disclosed or suggested by Davcy that can create water droplets from water as required by claim 6.

For at least these reasons, claim 6 is patentable over Davey. Claim 8 depends from claim 6 and is patentable along with claim 1 and needs not be separately distinguished at this time. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claims.

Claims 11-14 are rejected under 35 USC § 102(e) as being anticipated by Bishop et al. (US 6,843,516). Applicants respectfully traverse this rejection.

Claim 11 requires a rigid tube having an inner diameter that has at least two rings mounted thereto in an exhaust gas passageway. Claim 11 also requires that the rings be adapted to create water droplets from cooling water as exhaust gases and the cooling water exit the combustion engine. The present rigid tube structure that has an inner diameter having at least two rings mounted thereto helps form the water into water droplets and mix the gas with the water so as to reduce noise generated by the combustion engines (see page 4, lines 12-23 of the present specification).

Unlike the present invention of claim 11, Bishop et al. are directed to a coupler for a low pressure piping system for transporting material (Bishop et al., col. 1, lines 22-25). Bishop et al. discuss a seamless metal tube 2 having a U-shaped surface, where an elastomeric annular seal 18 is seated on the inner surface. The Bishop et al. seamless metal tube 2 that the Bishop et al. elastomeric annular seal 18 is seated is not an exhaust gas passageway, as required by claim 11, since the material flow is not going to pass through the seamless metal tube 2. Rather, the material flow will pass through metal tube 13 that is received in the seamless metal tube 2.

Moreover, the Bishop et al. elastomeric annular seal 18 is completely different from the ring as claimed by claim 11. The Bishop et al. elastomeric annular seal 18 helps ensure that the material flowing through the pipes does not leak out so that an effective and efficient flow is maintained (Bishop et al., col. 1, lines 39-41). The Bishop et al. seal

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18 is actually employed to minimize the interference to the material flow, while the present rings are used to create constrictions and interferences to the fluid flow.

In addition, the Bishop et al. elastomeric annular seal 18 functions as a seal, contrary to the rings in claim 11, which help form the water into water droplets and mix the gas with the water so as to reduce noise generated by the combustion engines.

The rejection indicates that the language "the rings are positioned and adapted to create water droplets" is not limiting in that any gas containing a vapor would condense when subject to a cooling surface such as the rings of Bishop et al. Applicants respectfully contend that the claimed rings are distinct in that the claimed rings function as an obstruction constricting the water so as to create water droplets. In fact, there is no cooling process disclosed or suggested by Bishop et al. that can create water droplets from water as required by claim 11.

For at least these reasons, claim 11 is patentable over Bishop et al. Claims 12-14 depend from claim 11 and are patentable along with claim 11 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claims.

Claim Rejections – 35 USC § 103

Claim 2 is rejected under 35 USC 103(a) as being unpatentable over Jorg Alexnat et al. in view of Woon et al. (US 6,408,625). Applicants respectfully traverse this rejection. Claim 2 depends from claim 1 and is patentable over Jorg Alexnat et al. in view of Woon et al. for at least the same reasons discussed above regarding claims 1 and 3-4. Woon et al. do not remedy the deficiencies of Jorg Alexnat et al. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claim.

Claim 5 is rejected under 35 USC 103(a) as being unpatentable over Jorg Alexnat et al. in view of Smullin et al. (US 6,591,939). Applicants respectfully traverse this rejection. Claim 5 depends from claim 1 and is patentable over Jorg Alexnat et al. in view of Smullin et al. for at least the same reasons discussed above regarding claims 1 and 3-4. Smullin et al. do not remedy the deficiencies of Jorg Alexnat et al. Applicants

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are not conceding the relevance of the reference to the remaining features of the rejected claim.

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over Davey. Applicants respectfully traverse this rejection. Claim 7 depends from claim 6 and is patentable over Davey for at least the same reasons discussed above regarding claims 6 and 8. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claim.

Claim 9 is rejected under 35 USC 103(a) as being unpatentable over Davey in view of Smullin et al. Applicants respectfully traverse this rejection. Claim 9 depends from claim 6 and is patentable over Davey in view of Smulli et al. for at least the same reasons discussed above regarding claims 6 and 8. Smullin et al. do not remedy the deficiencies of Davey. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claim.

Claim 10 is rejected under 35 USC 103(a) as being unpatentable over Davey. Applicants respectfully traverse this rejection. Claim 10 depends from claim 6 and is patentable over Davey for at least the same reasons discussed above regarding claims 6 and 8. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claim.

Claim 15 is rejected under 35 USC 103(a) as being unpatentable over Bishop et al. Applicants respectfully traverse this rejection. Claim 15 depends from claim 11 and is patentable over Bishop et al. for at least the same reasons discussed above regarding claims 11-12 and 13-14. Applicants are not conceding the relevance of the reference to the remaining features of the rejected claim.

In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be

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directed to the undersigned attorney, Michael D. Schumann, Reg. No. 30,422, at (612) 455-3803.



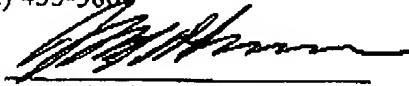
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Respectfully submitted,

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